

charts

Name: _____



Requirements	Passed
1. Describe at least two of the different types of compasses that are used at sea and explain how a magnetic compass works. Know some of the problems that can occur in using a compass with particular focus on use aboard a vessel, and how to overcome these.	
2. Explain the difference between a) True North b) Magnetic North c) Grid North and demonstrate the ability to find each of these, both on a chart and at sea	
3. a) Explain the cause and effect of variation. b) Know the relationship between magnetic bearings and true bearings. c) Show where to locate the variation adjustment on a chart and know how to calculate the present variation.	
4. Demonstrate a working knowledge of bearings and reciprocal bearings by being able to carry out an exercise at while on a boat to determine your position on a chart by the cross bearings' method.	
5. Carry out the following: a) Explain what a chart is. b) Know the differences between a chart and a map. c) Demonstrate a knowledge of scale. d) Explain why we only measure distance on the latitude scale on a chart. e) Be able to read depth contours on a chart, and explain how contours indicate slopes, gradients and major geographic land and seabed features. f) What are soundings and how are they represented on a chart. g) Using a pair of dividers, correctly measure a distance between 2 points on a chart and determine the actual distance that this represents in nautical miles. h) Demonstrate knowledge of some common charting symbols (IALA region B). i) Explain what is meant by the light characteristics shown on a chart e.g. Fl.G.2s5M.	
6. On a suitable chart, use a parallel rule to plot a course for a hypothetical voyage of approximately 20 nautical miles with at least 5-way points. Provide your watch keeper with a list of magnetic courses to steer, co-ordinates of the waypoints, and time to steam between each waypoint at a speed of 10 knots over the ground. (SoG).	

10/19
08/20v1

Badge Awarded

